



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/670,198	09/26/2003	Tadayuki Fushimi	KAW-306-USAP	4475
28892	7590	09/28/2004	EXAMINER	
SNIDER & ASSOCIATES P. O. BOX 27613 WASHINGTON, DC 20038-7613			TRAN, THUY V	
			ART UNIT	PAPER NUMBER
			2821	

DATE MAILED: 09/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/670,198	FUSHIMI, TADAYUKI	
	<b>Examiner</b>	<b>Art Unit</b>	
	Thuy V. Tran	2821	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-8,10 and 11 is/are rejected.
- 7) ☒ Claim(s) 3 and 9 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/04/2003</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

This is a response to the Applicant's filing on September 26<sup>th</sup>, 2003. In virtue of this filing, claims 1-11 are currently presented in the instant application.

#### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

#### ***Claim Objections/ Minor Informality***

2. Claims 6 and 9 are objected to because of the following informalities:

Claim 6, line 2, "lamp" (first and second occurrences) should be changed to --lamps--; and "is a" should be changed to --are--;

Claim 9, line 2, "and/or" should be changed to --and--; and "is" should be changed to --form--.

Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Art Unit: 2821

4. Claims 1-2, 4-8, and 10-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Kohn (U.S. Patent No. 6,747,421).

With respect to claim 1, Kohn discloses, in Fig. 1, a high voltage transformer [10] for lighting a plurality of discharge lamps [20] (see col. 1, lines 6-8; col. 6, lines 31-33); the high voltage transformer [10] comprises a primary coil [L] for inputting an AC voltage (see col. 5, lines 56-58) and a secondary coil (see Fig. 1) for outputting a predetermined AC voltage higher than the AC voltage inputted (see col. 4, lines 26-34); wherein the primary coil [L] comprises a starter primary winding (part connected to lead 27 from tap) for initially lighting the discharge lamps, and a normal lighting primary winding for normally lighting the discharge lamps [20] (see col. 6, lines 31-33).

With respect to claim 2, Kohn discloses, in Fig. 1, that the starter primary winding is comprised by a part of the normal lighting primary winding by providing a tap (see Fig. 1) in the normal lighting primary winding [L].

With respect to claim 4, Fig. 1 of Kohn shows that starter primary winding has a smaller number of turns than that of the normal lighting primary winding.

With respect to claim 5, Fig. 1 of Kohn shows that the high voltage transformer is an inverter transformer.

With respect to claim 6, Kohn discloses that the discharge lamps [20] are cold cathode fluorescent lamps (see col. 3, line 11; col. 6, lines 31-33).

With respect to claim 7, Fig. 1 of Kohn shows a discharge lamp driving apparatus comprising the high voltage transformer [10] as expressly recited above, and further comprising (1) first switching means [16] for controlling an energizing state of the starter primary winding,

Art Unit: 2821

and (2) second switching means [14] for controlling an energizing state of the normal lighting primary winding.

With respect to claim 8, Fig. 1 of Kohn shows that a switching frequency for driving the first switching means [16] and a switching frequency for driving the second switching means [14] are switchable therebetween (via control circuit [28]; see Fig. 1).

With respect to claim 10, Fig. 1 of Kohn shows that the first and second switching means [16, 14] are partly used in common (having bases coupled to a positive input 12a).

With respect to claim 11, Kohn inherently discloses that the first switching means [16] energizes the starter primary winding for a predetermined time (via LC resonance circuit; see col. 5, line 59 – col. 6, line 10).

***Allowable Subject Matter***

5. Claims 3 and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter:

Prior art fails to disclose or fairly suggest:

- A high voltage transformer for lighting a plurality of discharge lamps wherein the starter primary winding is provided independently from the normal lighting primary winding so as to have a diameter smaller than that of the normal lighting primary winding, in combination with the remaining claimed limitations as called for in claim 3; and

Art Unit: 2821

- A high voltage transformer for lighting a plurality of discharge lamps wherein the first and second switching means form a full bridge circuit, in combination with the remaining claimed limitations as called for in claim 9.

***Citation of relevant prior art***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Prior art Henry (Pub. No.: US 2004/0113569) discloses an apparatus and method for striking a fluorescent lamp.

Prior art Chen (U.S. Patent No. 4,187,450) discloses a high frequency ballast transformer.

Prior art Dendy et al. (U.S. Patent No. 3,967,159) discloses a power supply for a laser or gas discharge lamp.

***Inquiry***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thuy V. Tran whose telephone number is (571) 272-1828. The examiner can normally be reached on M-F (8:00 AM -5:00 PM).

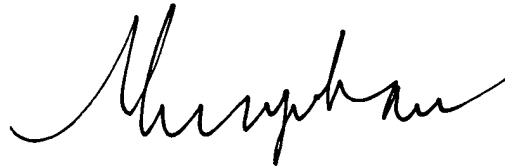
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2821

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thuy V. Tran  
Examiner  
Art Unit 2821

09/26/2004

A handwritten signature in black ink, appearing to read 'Thuy V. Tran', is written over the printed name and title.